ABSTRACT

Analytical determination of active compounds by liquid chromatography IV

Diploma thesis

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In this thesis, conditions were optimized for the reversed-phased high-performance liquid chromatography for quantitative evaluation of indomethacin in a rabbit plasma. Before the determination of indomethacin a solid phase microextraction was made. The fiber was coated with polydimethylsiloxane/divinylbenzene (PDMS/DVB) with a thickness of 60 μm. The fiber was immersed in the sample. The plasma was adjusted to pH 2.7. Sorption time was set at 30 minutes and desorption time was 10 minutes. Indomethacin was desorpted in the mobile phase. The mobile phase consisted of methanol with water (75:25) and pH was adjusted to a value of 3. The flow rate was 0,7 ml / min and detection was carried out at a wavelength of 220 nm. For linearity a calibration curve was costructed. Calibration curve was controled and verified by analysis of model samples prepared. The detection limit and quantitative limit were calculated for indomethacin add flufenamic acid.